DESCRIPTION OF A NEW SPECIES OF UROCERUS GEOFFROY (HYMENOPTERA: SIRICIDAE) FROM JAPAN

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Abstract.—Urocerus tsurugianus, n. sp., from Japan is described and illustrated. Characters are given to distinguish it from U. japonicus Smith.

Key Words: Siricidae, Urocerus, new species, Japan

Four species of woodwasps belonging to the genus Urocerus are recorded from Japan, U. antennatus Marlatt, U. japonicus Smith, U. multifasciatus Takeuchi, and U. yasushii Yano (Takeuchi 1955, 1962; Togashi 1972). Recently, I found one specimen of Urocerus which is closely allied to U. japonicus Smith. After comparing this specimen with about 50 female specimens of U. japonicus collected in Honshu, Shikoku, and Kyushu, I found it is easily separable by the coloration of the 3rd to 7th and 8th tergites, the shape of the fore inner tibial spur, the small cenchri, the shape of the precornal basin, and the structure of the lancet. Therefore, I concluded that my specimen is new to science. In this paper, I describe and illustrate this new species.

Urocerus japonicus Smith (Figs. 7, 8, 10-11, 13-14, 17-20, 22-23)

I examined about 50 female specimens and about 30 male specimens of *U. japonicus* Smith collected in Honshu (Iwate, Tokyo, Saitama, Kanagawa, Nagano, Ishikawa, and Okayama), Miyake Is., Shikoku (Ehime and Kochi), and Kyushu (Fukuoka).

Supplementary note. Antenna 26-segmented. Antenno-ocular distance shorter than distance between antennal sockets (ratio about 1.0:1.5–1.7). Distance between cenchri longer than breadth of each one as 1.2–1.5:1.0. Wings: length of 1st cubital cell (1R1) 1.4–1.7 times as long as 2nd one (1RS). Front inner tibial spur as in Fig. 8. Cornus longer than length of precornal basin (ratio about 2.3–2.7:1.0); cornus, in dorsal view, as in Fig. 10; basal portion of cornus with or without process; apical portion of the lance as in Figs. 17 and 19; 3rd annulus of lancet slightly curved (Figs. 18 and 20). Coloration of abdomen as follows: 1st and 2nd tergites yellow; 3rd to 7th tergites dark brown to black (Fig. 23); 8th tergite yellow but apical ½ black (Fig. 23); 9th tergite black or with yellow macula or entirely yellow.

Variation in coloration. Head yellowish brown, sometimes frontal area and ocellar basin dark brown; 1st, 2nd and 8th tergites yellow but apical ¹/₃ to apical margin of 8th tergite dark brown to black; 3rd to 7th tergites dark brown (Fig. 23) (about 95% of examined specimens); sometimes 3rd to 4th tergites yellow (Fig. 22) (about 5% of examined specimens).

Urocerus tsurugianus Togashi, new species (Figs. 1–6, 9, 12, 15–16, 21)

Female.—Length including cornus 24 mm. Body pale reddish yellow with following parts dark brown: apex of mandible, malar space, frons, ocellar basin, postocel-



Figs. 1–8. 1–6. *Urocerus tsurugianus*, holotype. 1, Head, dorsal view. 2, Basal 5 antennal segments, lateral view. 3, Pronotum, dorsal view. 4, Forewing showing cells 1R1 and 1RS. 5, Front inner tibial spur, lateral view. 6, Claw, lateral view. 7–8, *U. japonicus*, Ehime Prefecture. 7, Forewing showing cells 1R1 and 1RS. 8, Front inner tibial spur, lateral view.

lar area, lateral sides of pronotum, tegula, mesonotum, mesoscutellum, under thorax, most of 1st tergite, posterior ³/₄ of 8th tergite, 7th to 9th sternites, and sheath; basal ¹/₄ of 8th tergite dirty yellow. Antenna pale reddish yellow. Wings yellowish hyaline, stigma and veins pale reddish yellow. Legs pale reddish yellow with following parts dark brown to black: all coxae and trochanters, hind femur, apical ¹/₃ of hind tibia, and apical 2 segments of all tarsi.

Head: Dilated behind eyes (Fig. 1); interocellar, postocellar, and lateral furrows indistinct; postocellar area rectangular, with distinct median longitudinal furrow (Fig. 1); OOL:POL:OCL = 1.0:1.0:3.6; antennoocular distance shorter than distance between antennal sockets (ratio about 1.0: 1.6); malar space long, twice as long as pedicel.

Antenna 25-segmented; relative lengths of basal 5 segments about 5.1:1.0:2.8:2.7: 2.6; pedicel rather subquadrate (Fig. 2).

Thorax: Normal; midlength of pronotum short, as long as POL or OOL (Fig. 3); cenchrus rather small, distance between them longer than breadth of each one (ratio about 1.6:1.0). Wings: 1st cubital cell (1R1) longer than 2nd one (1RS) (ratio about 2.1:1.0). Legs: hind basitarsus slightly shorter than fol-



Figs. 9–14. 9–11, Precornal basin and cornus, dorsal view. 9, Urocerus tsurugianus, holotype. 10, U. japonicus, Ehime Prefecurue. 11, U. japonicus, Kanagawa Prefecture. 12–14, Cornus, lateral view. 12, U. tsurugianus, holotype. 13, U. japonicus, Ehime Prefecture. 14, U. japonicus, Kanagawa Prefecture.

lowing 4 segments combined; front inner tibial spur as in Fig. 5; claw as in Fig. 6.

Abdomen: Normal; precornal basin broader than long (ratio between breadth and length about 1.5:1.0) (Fig. 9); length of precornal basin ½ as long as length of cornus; cornus as in Figs. 9 and 12; basal portion without process (Fig. 12); sheath longer than basal plate (ratio about 1.3–1.4:1.0); apical portion of lance as in Fig. 15; 3rd annulus of lancet strongly curved (Fig. 16).

Punctation: Head and thorax distinctly, densely, and rather reticulately punctured, matt; hind orbits nearly impunctate, shining (Fig. 1); abdominal tergites shagreened.

Male.—Unknown.

Food plant.—Unknown.

Distribution.—Japan (Honshu).

Holotype.—Female, 13. IX. 1980, Sannomiya, Tsurugi-machi, Ishikawa Prefecture, I. Togashi leg., deposited in the collection of the National Science Museum (Nat. Hist.), Tokyo.

Remarks.—This new species very closely resembles Urocerus japonicus Smith, but

it is easily separable from the latter by the shape of the front inner tibial spur (see Figs. 5, 8), by the black or mostly black 8th abdominal tergite (in japonicus, the anterior ²/₃ or most of the 8th abdominal tergite is yellow, see Figs. 22-23), by the small cenchri with the ratio between the distance between the cenchri and the breadth of one as 1.6:1.0 (in japonicus, the ratio between the distance between the cenchri and the breadth of each one is 1.2-1.5:1.0), by the long precornal basin with the ratio between the length of the precornal basin and the length of the cornus as 1.5:1.0 (in japonicus, the cornus is 2.3-2.7 times as long as the length of the precornal basin, see Figs. 9-11), and by the strongly curved 3rd annulus of the lancet (in japonicus, the 3rd annulus of the lancet is slightly curved, see Figs. 16, 18, and 20).

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Figs. 15–20. 15–16, Urocerus tsurugianus, holotype. 17–18. U. japonicus, Tokyo Prefecture. 19–20, U. japonicus, Saitama Prefecture. 15, 17, 19, Apical portion of lance. 16, 18, 20, Apical portion of lancet. Arrow points to 3rd annulus.



Figs. 21–23. 21, Urocerus tsurugianus, holotype, dorsal view. 22–23, U. japonicus, Tokyo Prefecture, dorsal view.

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